

**Program Description**

The Biology Transfer Pathway Associate of Science (AS) degree program offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Biology bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so that students completing this pathway degree and transferring to one of the seven Minnesota State universities enter the university with junior-year status. All courses in the Transfer Pathway associate degree will directly transfer and apply to the designated bachelor's degree programs in a related field.

**Minnesota State Universities - Designated Degrees**

- Bemidji State University: Biology BA, Biology BS
- Metropolitan State University: Biology BA
- Minnesota State University, Mankato: Biology BS
- Minnesota State University, Moorhead: Biology BA
- Southwest Minnesota State University: Biology BA
- St. Cloud State University: Life Sciences BES, Biology BS: Biodiversity, Ecology and Evolution
- Winona State University: Biology BS (Allied Health, Cell & Molecular, Ecology, Environmental Science)

**Program Goals**

By completing this program, students will achieve the following learning goals:

1. Demonstrate comprehension of biological systems at all levels of biological organization;
2. Apply the scientific method within course investigations;
3. Communicate biological data, analyses, and interpretations orally and/or in writing; and
4. Demonstrate application of critical thinking in classroom, field, and laboratory studies.

**Required Courses: 60 Total Credits**

- BIOL 1106 Principles of Biology I..... 4
- BIOL 1107♦ Principles of Biology II ..... 4
- BIOL 2202♦ Genetics..... 4

**Choose one of the Restricted Biology Electives:**

- BIOL 2201♦ Microbiology ..... 4
- BIOL 2208♦ Cell Biology..... 4
- BIOL 2209♦ General Ecology..... 4

**Choose at least 14 credits from additional Math and Science electives (check with receiving institution to determine best elective choices for desired program):**

- BIOL 1103 Environmental Science Lecture..... 3
- BIOL 1133 Environmental Science Lab..... 1
- BIOL 2201♦ Microbiology ..... 4
- BIOL 2206♦ Animal Biology..... 4
- BIOL 2207♦ Plant Biology ..... 4
- BIOL 2208♦ Cell Biology..... 4
- BIOL 2209♦ General Ecology..... 4
- BIOL 2230♦^ Directed Research in Biology ..... 2
- CHEM 2061♦ Organic Chemistry I..... 5
- CHEM 2062♦ Organic Chemistry II ..... 5
- MATH 1114♦ Introduction to Statistics..... 4
- MATH 1400♦ Calculus I ..... 5
- MATH 1401♦ Calculus II ..... 5
- PHYS 1317♦ General Physics I ..... 5
- PHYS 1318♦ General Physics II ..... 5
- PHYS 1327♦ College Physics I..... 6
- PHYS 1328♦ College Physics II ..... 6

Complete at least 30 credits in courses from the Minnesota Transfer Curriculum (MnTC), including all courses listed. You must complete at least one course in six of the ten goal areas. One course may satisfy more than one goal area, but the course credits may be counted only once.

- 1. Communication
  - ENGL 1120♦ **OR** ENGL 1121♦ ..... 4
  - CMST 1110 **OR** CMST 2215 **OR** CMST 2220 ..... 3
- 2. Critical Thinking (*met by ENGL 1120 or 1121*)
- 3. Natural Science
  - CHEM 1061♦ ..... 4
  - CHEM 1062♦ ..... 4
- 4. Mathematical/Logical Reasoning
  - MATH 1200 (or higher)♦ ..... 3-5
  - Choose MATH course (higher than MATH 1200)♦ ..... 4-5
- 5. History/Social/Behavioral Sciences
  - Choose course(s) totaling 3 credits ..... 3
- 6. Humanities/Fine Arts
  - Choose course(s) totaling 3 credits ..... 3
- 7. Human Diversity
- 8. Global Perspective
- 9. Ethical/Civic Responsibility
- 10. People and the Environment

♦ Course has prerequisite - see course schedule or catalog description.

^ Course requires Instructor permission.

NOTE: You are encouraged to contact an academic advisor at 763-433-1230 for course planning assistance and information about transfer credit evaluation and transfer options.

# Biology Transfer Pathway

Associate of Science (AS) Degree

## Pathway Plan

The following two-year Pathway Plan is suggested for full-time students. Part-time students will need more time to complete this pathway. For assistance with pathway planning, students should schedule an appointment with an academic advisor. See also the college catalog Appendix for course offering information.

### Semester One (14-15 Credits)

- BIOL 1106 Principles of Biology I..... 4
- CHEM 1061♦ Principles of Chemistry I..... 4
- MATH 1200♦ College Algebra (or higher)..... 3-5
- General Ed/MnTC ..... 3-4

### Semester Two (14-15 Credits)

- BIOL 1107♦ Principles of Biology II ..... 4
- CHEM 1062♦ Principles of Chemistry II..... 4
- MATH Elective ..... 3-5
- General Ed/MnTC ..... 3-4

### Semester Three (15-16 Credits)

- BIOL 2202♦ Genetics..... 4
- Restricted Biology Elective *OR* Additional Math/Science Elective..4-6
- General Ed/MnTC ..... 7-8

### Semester Four (15-16 Credits)

- Restricted Biology Elective *OR* Additional Math/Science Elective..4-6
- Additional Math/Science Elective ..... 4-6
- General Ed/MnTC ..... 7-8

## Degree Specifics

- A minimum of 60 semester credits in courses numbered 1000 or above.
- A minimum cumulative grade point average (GPA) of 2.0 in courses numbered 1000 or above at ARCC.
- Some students may need preparatory courses in the areas of English, mathematics or reading. Courses numbered below 1000 will not apply toward this degree.
- Satisfy residency requirements.
- A minimum grade of C must be earned in all program requirements.
- Completion of specific degree requirements.
- Each state university has specific program requirements for completion. Please speak with your advisor about requirements at receiving institutions.
- To receive your diploma, you must apply to graduate.
- The requirements of this program are subject to change without notice.

♦ *Course has prerequisite - see course schedule or catalog description.*

^ *Course requires Instructor permission.*

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